

Hydrogen Peroxide Concentrator

Benefits

- Provides concentrated hydrogen peroxide at the point of use.
- 70 percent hydrogen peroxide can be enriched to 85 percent.
- Concentrated hydrogen peroxide not exposed to reactive surfaces.
- Easily sized to avoid storage.

The Technology

The hydrogen peroxide concentrator uses membranes that can permeate water preferentially over hydrogen peroxide. The membrane system is designed so that the hydrogen peroxide solution is on one side of the membrane and dry air is on the other side. The water capacity of the sweep air is increased by increasing the temperature, but the temperature should be kept below the spontaneous decomposition temperature of hydrogen peroxide. This innovative method of concentrating hydrogen peroxide avoids the problems associated with current methods, has no moving parts, provides concentrated hydrogen peroxide at the point of use, and is easily sized to avoid storage.

Options for Commercialization

This technology opportunity is available through the NASA Innovative Partnerships Program. The program seeks to stimulate development of commercial applications from NASA-developed technology. The technology was designed, tested, and used at KSC. NASA seeks qualified companies to license and commercialize this technology.

Contact

If your company is interested in the new hydrogen peroxide concentrator, or if you desire additional information, please reference Case Number KSC-12666 and contact:

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Commercialization Checklist

- Patent Pending
- ✓ U.S. Patent No. 7,122,166
- Copyrighted
- ✓ Available to License
- Available for no-cost transfer
- Seeking industry partner for further codevelopment

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